

1/2 019 UNCLASSIFIED  
TITLE--THE INFLUENCE OF THE VERMAL ZONE OF CEREBELLUM ANTERIOR LOBE ON THE  
BACKGROUND ACTIVITY OF THE FASTIGIAL NEURONS -U-  
AUTHOR--(02)-AMATUNI, A.S., OGANESYAN, E.A.  
COUNTRY OF INFO--USSR  
SOURCE--NEYROFIZIOLOGIYA, 1970, VOL 2, NR 3, PP 260-268  
DATE PUBLISHED-----70  
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES  
TOPIC TAGS--CEREBELLUM, CAT, NEURON, ELECTRICITY  
CONTROL MARKING--NO RESTRICTIONS  
DOCUMENT CLASS--UNCLASSIFIED  
PROXY REEL/FRAME--1999/1624  
CIRC ACCESSION NO--AP0123467  
UNCLASSIFIED  
PROCESSING DATE--23OCT70

PROCESSING DATE--23OCT70

UNCLASSIFIED

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CIRC ACCESSION NO--AP0123467  
ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THE INFLUENCE OF ELECTRICAL STIMULATION OF THE ANTERIOR LOBE OF THE CEREBELLAR CORTEX ON NEURONAL ACTIVITY OF DIFFERENT PARTS OF FASTIGIAL NUCLEI WAS STUDIED IN SLIGHTLY ANESTHETIZED (NEMBUTAL) CATS. THE INHIBITORY INFLUENCE OF THE CEREBELLAR CORTEX (80.6PERCENT OF THE RESPONDING NEURONS) WAS DISPLAYED IN A COMPLETE BLOCKADE OR SLOWING DOWN OF THE FREQUENCIES OF SPIKE ACTIVITY FOLLOWED A LONG AFTER DISCHARGE AND REBOUND EFFECT. THE FACILITATING INFLUENCE OF THE CEREBELLAR CORTEX (14.5PERCENT) OF NEURONS WAS CHARACTERIZED BY AN INCREASE IN THE FREQUENCIES OF SPIKE ACTIVITY. RECIPROCAL INFLUENCES ON DIFFERENT SUBORTICAL NEURONS AND BLOCKADE OF THE INHIBITORY INTERACTION BETWEEN NEIGHBOURING CELLS OF THE NUCLEUS WERE DISCOVERED. THE EFFECIENCY OF THE CORTICAL STIMULATION DEPENDED ON THE LOCATION OF THE ELECTRODE. ZONES OF MAXIMAL DESITY OF PROJECTIONS TO EACH NUCLEAR NEURON COULD BE DISCOVERED IN THE CEREBELLAR CORTEX.

FACILITY: THE L. A. ORBELI INSTITUTE OF PHYSIOLOGY.  
ACADEMY OF SCIENCES, ARMENIAN SSR, YEREVAN.

UNCLASSIFIED

1/2 011 UNCLASSIFIED PROCESSING DATE--09OCT70  
TITLE--CUPRIC CHLORIDE POTASSIUM ALUMINATE POTASSIUM SILICATE WATER SYSTEM  
AT 20DEGREES -U-  
AUTHOR--(03)--BABAYAN, G.G., GALSTYAN, V.D., OGANESYAN, E.B.  
COUNTRY OF INFO--USSR  
SOURCE--ARM. KHIM. ZH. 1970, 23(2), 124-7  
DATE PUBLISHED--70  
SUBJECT AREAS--CHEMISTRY  
TOPIC TAGS--COPPER CHLORIDE, X RAY DIFFRACTION, ALUMINUM POTASSIUM  
SILICATE, WATER  
CONTROL MARKING--NO RESTRICTIONS  
DOCUMENT CLASS--UNCLASSIFIED  
PROXY REEL/FRA--1995/1320  
CIRC ACCESSION NO--AP0116780  
UNCLASSIFIED  
STEP NO--UR/0426/70/023/002/0124/0127

PROCESSING DATE--090CT70

UNCLASSIFIED

2/2 011  
CIRC ACCESSION NO--AP0116780  
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE SYSTEM WAS STUDIED BY THE  
SOLY. METHOD AND BY MEASURING THE PH, SP. COND., AND THE APPARENT PPT.  
VOL. FOR CUO IS TO SID SUB2 PLUS AL SUB2 O SUB3 EQUALS 1 IN THE  
STARTING MIXT., CU ALUMINOSILICATE WITH THE COMPN. AL SUB2 O SUB3 .2SIO  
SUB2 NEGATIVE 4 CUO.MH SUB2 O PPTS. FOR OTHER VALUES OF THIS RATIO (0.1  
TO 8) PPTS. OF VARIABLE COMPN. ARE FORMED. THE PPTS. WERE STUDIED BY  
THERMOGRAPHIC, X RAY DIFFRACTION, AND CRYSTALLOOPTICAL METHODS.  
FACILITY: INST. OBSHCH. NEORG. KHIM., EREVAN, USSR.

UNCLASSIFIED

UDC 577.4

USSR

OGANESYAN, E. V., GASPARYAN, YU. S.

"Some Information Problems of the Group Behavior of Automata"

Sb. tr. Zangezursk. lab. adaptivn. sistem AN ArmSSR (Collected Works of the Zangezursk Laboratory of Adaptive Systems of the Armenian SSR Academy of Sciences), 1972, vyp. 1., pp 89-93 (from RZh-Kibernetika, No 12, Dec 72, Abstract No 12V259)

No abstract

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Bionics

UDC 62--50:007:57

USSR

ARUTYUNYAN, V. S., ABOVYAN, V. G., and OGANESYAN, E. V., Laboratory of Neurobionics, Academy of Sciences Armenian SSR

"On the Problem of Scanning in Biological Systems"

Yerevan, Biologicheskii Zhurnal Armenii, Vol 24, No 9, 1971, pp 90-93

Abstract: A probabilistic model is developed of the search for an extreme point located somewhere in a search space, given a certain starting point. The effectiveness of a random path from the starting point to the extreme point is given in terms of the angle between this path and a straight line connecting the two points. After K independent experiments, which produce K random paths between the two points, a sample is taken of a certain set of elements of the random event, and then from this set the single element is selected which is associated with the highest value of a certain index. Two formulas (for the discrete and continuous cases, respectively) are developed for determining the probability that a certain element will be the best one.

This model may be applied to extreme behavioral acts of animals, such as a dog seeking an odoriferous object located somewhere in a room (he is

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ARUTYUNYAN, V. S., et al., Biologicheskii Zhurnal Armenii, Vol 24, No 9, 1971, pp 90-93

actually seeking the point in space where the intensity of the smell is maximum). It is believed that the study of such acts may promote the development of optimal scanning algorithms, and the knowledge thus acquired may be applied to industrial problems.

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UDC 576.809.51

USSR

OGANESYAN, G. G., and OGANESYAN, M. G., Chair of Genetics and Cytology,  
Yerevan State University

"Comparative Radiosensitivity of Phage-Resistant and Lon Mutants of Escherichia Coli"

Yerevan, Biologicheskii Zhurnal Armenii, Vol 24, No 12, Dec 71, p 99

Abstract: When mutants, resistant to phages T2 and T4, were obtained from E. coli K12 (S), it was noted that much sliming takes place in colonies of some phage-resistant bacteria (mucoid colonies). A class of E. coli K12 mutants is also known, in which elevated sensitivity to radiation is also accompanied by abundant sliming of the colonies (lon mutations). The aim of the present paper is to study the radiosensitivity of phage-resistant mutants and the relationship of lon mutants to some T series phages. A large number of lon mutants was obtained, distinguished by high radiosensitivity (exceeding the control by a factor of more than 100) and much sliming of the colonies. In not a single one of the analyzed cases did the lon mutation bring about phage T2, were obtained and analyzed. The colonies of all the mutations had much sliming, as in the case of lon mutations. In not a single one of the studied mutants was an increased sensitivity to ultraviolet rays noted in comparison to the initial culture.

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UDC 576.809.51

USSR

OGANESYAN, G. G., and OGANESYAN, M. G., Chair of Genetics and Cytology,  
Yerevan State University

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Abstract: When mutants, resistant to phages T2 and T4, were obtained from E. coli K12 (S), it was noted that much sliming takes place in colonies of some phage-resistant bacteria (mucoid colonies). A class of E. coli K12 mutants is also known, in which elevated sensitivity to radiation is also accompanied by abundant sliming of the colonies (lon mutations). The aim of the present paper is to study the radiosensitivity of phage-resistant mutants and the relationship of lon mutants to some T series phages. A large number of lon mutants was obtained, distinguished by high radiosensitivity (exceeding the control by a factor of more than 100) and much sliming of the colonies. In not a single one of the analyzed cases did the lon mutation bring about phage T2, were obtained and analyzed. The colonies of all the mutations had much sliming, as in the case of lon mutations. In not a single one of the studied mutants was an increased sensitivity to ultraviolet rays noted in comparison to the initial culture.

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1/2 031  
TITLE--EFFECT OF DIETHYL AND TRIETHYLAMINES ON HYDROGEN COMBUSTION AT LOW  
PRESSURES. RATE CONSTANTS OF THE H PLUS ET SUB2 NH AND H PLUS ET SUB3 N  
AUTHOR--(03)-NALBANDVAN, A.B., MKRYAN, T.G., OGANESYAN, K.T.

PROCESSING DATE--23OCT70

COUNTRY OF INFO--USSR

SOURCE--ARM. KHIM. ZH. 1970, 23(2), 114-18

DATE PUBLISHED-----70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--TRIETHYLAMINE, COMBUSTION RATE, ACTIVATION ENERGY,  
DIETHYLAMINE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED  
PROXY REEL/FRA--1997/0801

STEP NO--UR/0426/70/023/002/0114/0118

CIRC ACCESSION NO--AP0119708

UNCLASSIFIED

2/2 031

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0119708  
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE EFFECT OF ET SUB2 NH AND ET  
SUB3 N ON THE COMBUSTION RATE OF 4:1 H<sub>2</sub>O WAS STUDIED IN A STATIC APP. AT  
580-670 DEGREES--SMALLER THAN 9 MM. AT CONCNS. 0-1 PERCENT, BOTH AMINES  
WERE INHIBITORS OF THE PROCESS, BUT ET SUB3 N WAS 1.3 TIMES AS ACTIVE AT  
ET SUB2 NH. THE ARRHENIUS PARAMETERS OF THE ELEMENTARY REACTIONS H PLUS  
ET SUB2 NH AND H PLUS ET SUB3 N WERE: ACTIVATION ENERGY 9.2 AND 10.5  
KCAL-MOLE, AND PREEXPONENTIAL FACOTR 0.57 TIMES 10 PRIME NEGATIVE 10 AND  
1.44 TIMES 10 PRIME NEGATIVE 10 CM PRIME 3-SEC, RESP.

UNCLASSIFIED

UDC: 51

USSR

KORBUF, A. A., OVSIYEVICH, B. L., ~~OGANESYAN, L. A.~~, PITTEL', B. G., Leningrad Department of the Central Mathematical Economics Institute, Academy of Sciences of the USSR

"Concerning V. V. Kolbin's Survey 'Stochastic Programming'"

Po povodu obzora V. V. Kolbina "Stokhasticheskoye programmirovaniye" (cf. English above), Leningrad, 1971, 12 pp, ill. (No 4000-72 Dep.) (from RZh-Kibernetika, No 6, Jun 72, Abstract No 6V443 Dep.)

Translation: It is shown that V. V. Kolbin's survey "Stochastic Programming" (RZh-Mat, 1970, 6V529) is mostly plagiarized from Zellmer's papers (G. Zellmer, "On Formulating Problems in Linear Stochastic Optimization", Math. und Wirtsch., Band 6, Berlin, 1969, pp 11-44; Wiss. Z. Hochsch. Oekonomie, Berlin, 1968, No 2, pp 163-169; No 4). The numerous inaccuracies and errors of the survey are analyzed. In particular, mention is made of gross errors in lemma 1.1, in the corollary of lemma 1.2, in lemmas 5.1, 5.2 and 5.4, and in theorems 5.1, 6.1 and 8.1. Authors' abstract.

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Alkaloids

UDC 542.91+547.752

USSR

BOYAKHCHYAN, A. P., OGANESYAN, L. L., and TATEVOSYAN, G. T., Institute of Fine Organic Chemistry, Acad. Sc. Armenian SSR, Yerevan

"Indole Derivatives. XXXI. Indole Analogs of Erythrine Alkaloids With a Six-Membered D Ring"

Yerevan, Armyanskiy Khimicheskiy Zhurnal, Vol 24, No 1, 1971, pp 64-69

Abstract: Synthesis of benz(j)indolo(2,3-h)quinolizine type compounds is described. A mixture of tryptamine,  $\beta$ -(2-ketocyclohexyl)propionic acid and xylene was refluxed in a nitrogen atmosphere, xylene was removed, the residue dissolved in chloroform, washed and dried, and the solvent removed. Crystallization from methanol gave an unsaturated lactam, m.p. 198° which could be converted to 7-oxo-1,2,3,4,4a,5,6,7,9,10-decahydrobenz(j)indolo-(2,3-h)quinolizine (I), m.p. 287° by treatment with hydrochloric acid. The enol lactone of  $\beta$ -(2-oxocyclohexyl)propionic acid reacted with tryptamine in benzene, the crystalline material formed was separated, the benzene solution was chromatographed on an alumina column to give a tryptamide of  $\beta$ -(2-oxocyclohexyl)propionic acid, m.p. 107°, which again could be converted to (I) by treatment with HCl. In a similar manner 7-oxo-9-methyl-1,2,3,4,-

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BOYAKHCHYAN, A. P., et al., Armyanskiy Khimicheskiy Zhurnal, Vol 24, No 1, 1971, pp 64-69

4a,5,6,7,9,10-decahydrobenz(j)indolo(2,3-h)quinolizine (II), m.p. 218° was prepared. Lithium aluminum hydride reduction of (I) gave 1,2,3,4,4a,5,6,7,9,10-decahydrobenz(j)indolo(2,3-h)quinolizine, m.p. 69-70°, and the reduction of (II) gave 9-methyl-1,2,3,4,4a,5,6,7,9,10-decahydrobenz(j)indolo(2,3-h)-quinolizine, m.p. 51-52°.

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REEL # 22  
NAUMENKO, V.G.  
to  
OGANESYAN, L.L.